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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

PUNNOOSE, ROY M

ART UNIT PAPER NUMBER

2877

DATE MAILED: 08/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/040,796

Applicant(s)

LEE ET AL.

Examiner

Roy M. Punnoose

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include reference signs 27 and 66, not mentioned in the description. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clegg et al (US 5,477,459) in view of Wiklund (US 5,051,934).

A. Claims 1, 6 and 8 are rejected because Clegg et al (Clegg hereinafter) discloses a method and apparatus comprising a portable display device (see col.15, lines 48-52), calculating positions of an object at different locations (see col.15, lines 37-41), for determining whether a first down has been achieved from the location of a football on a field of play (see col.19, lines 19-23). However, Clegg does not explicitly teach the use of a distance measuring device or a reflector for reflecting light pulses from a distance-

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measuring device for determining whether a first down has been achieved from the location of a football on a field of play.

B. Wiklund teaches the use of distance measuring device and a reflector for reflecting light pulses from a distance-measuring device for determining the distance between a desired point and a reference location in a football field (see abstract; col.7, lines 12+).

C. In view of Wiklund's teachings, it would have been obvious to one of ordinary skills in the art at the time the invention was made to incorporate Wiklunds' method and apparatus into Clegg's system due to the fact that such a system would provide an alternate method and apparatus for determining whether a first down has been achieved from the location of a football on a field of play. Accordingly, such incorporation would have constituted an alternative means/obvious engineering expedience for one of ordinary skill in the art at the time the invention was made.

4. Claim 2 is rejected because a method of determining the location of a football in polar coordinates is taught by both Clegg (see col.17, lines 7-13) and Wiklund (see col.4, lines 35-39).

5. Claim 3 is rejected because a method of determining the location of a football in Cartesian coordinates is taught by Clegg (see col.17, lines 7-13).

6. Claim 4 is rejected because in view of Clegg's and Wiklund's teachings it would have been obvious to one of ordinary skills in the art at the time the invention was made to transmit any data to a scoreboard or other display device for determining whether a first down has been achieved from the location of a football on a field of play.

7. Claim 5 is rejected because in view of Clegg's and Wiklund's teachings it would have been obvious to one of ordinary skills in the art at the time the invention was made to store any

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information in memory or replace or update the information in any desired manner for determining whether a first down has been achieved from the location of a football on a field of play.

8. Claim 7 is rejected because heater and heater control circuits are known in the art for providing stable operation of outdoor electronic devices. Incorporating such a device in applicant's claimed invention would have been obvious to one of ordinary skills in the art at the time the invention was made. Accordingly, such incorporation would have constituted an alternative means/obvious engineering expedience for one of ordinary skill in the art at the time the invention was made.

Conclusion


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Examiner Roy M. Punnoose** whose telephone number is **703-306-9145**. The examiner can normally be reached on 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the applicant can reach his **Supervisory Patent Examiner, Frank G. Font**, at (703) 308-4881.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-0530.

Roy M. Punnoose
Patent Examiner
Art Unit 2877
August 11, 2003



Mr. Frank G. Font
Supervisory Patent Examiner